AUTHOR INDEX

ALFÉREZ M. J. M. *see* CAMPOS M. S., BARRIONUEVO M., ALFÉREZ M. J. M., GÓMEZ-AYALA A. E., RODRÍGUEZ-MATAS M. C., LOPEZ ALIAGA I. & LISBONA F. Interactions among iron, calcium, phosphorus and magnesium in the nutritionally iron-deficient rat 771

ALMEIDA S. A., ANSELMO-FRANCI J. A., ROSA E SILVA A. A. & LAMANO CARVALHO T. L. Chronic intermittent immobilization of male rats throughout sexual development: a stress protocol 701

ANGELO S. *see* DEVÉS R., ANGELO S. & ROJAS A. M. System y^+L: the broad scope and cation modulated amino acid transporter 211

ANSELMO-FRANCI J. A. *see* ALMEIDA S. A., ANSELMO-FRANCI J. A., ROSA E SILVA A. A. & LAMANO CARVALHO T. L. Chronic intermittent immobilization of male rats throughout sexual development: a stress protocol 701

ANTUNES-RODRIGUES J. *see* CARVALHO E. G., FRANCI C. R., ANTUNES-RODRIGUES J., GUTKOWSKA J. & FAVARETTO A. L. V. Salt overload does not modify plasma atrial natriuretic peptide or vasopressin during pregnancy in rats 503

AUDSLEY N. *see* KIBBLE J. D., AUDSLEY N., DAY J. P. & GREEN R. A new protocol for the measurement of picomole quantities of magnesium in rat renal tubular fluid 11

BAKER G. F., O'GORMAN R. & BAKER P. Glucose transport inhibitors protect against 1,2-cyclohexanedione-produced potassium loss from human red blood cells 239

BAKER P. *see* BAKER G. F., O'GORMAN R. & BAKER P. Glucose transport inhibitors protect against 1,2-cyclohexanedione-produced potassium loss from human red blood cells 239

BAKHRAMOV A., EVANS A. M. & KOZLOWSKI R. Z. Differential effects of hypoxia on the intracellular Ca^{2+} concentration of myocytes isolated from different regions of the rat pulmonary arterial tree 337

BALDWIN K. M. *see* ROY R. R., PIEROTTI D. J., BALDWIN K. M., ZHONG H., HODGSON J. A. & EDGERTON V. R. Cyclical passive stretch influences the mechanical properties of the inactive cat soleus 377

BALMENT R. J. *see* TEIN M. S. C., BREEN S. A., LOVEDAY B. E., DEVLIN H., BALMENT R. J., BOYD R. D. H., SIBLEY C. P. & GARLAND H. O. Bone mineral density and composition in rat pregnancy: effects of streptozotocin-induced diabetes mellitus and insulin replacement 165

BALMENT R. J. Book Review: *Comparative Vertebrate Endocrinology*, 3rd edn, by Peter J. Bentley 875

BALTZOPOULOS V. *see* MAGANARIS C. N., BALTZOPOULOS V. & SARGEANT A. J. Differences in human antagonistic ankle dorsiflexor coactivation between legs; can they explain the moment deficit in the weaker plantarflexor leg? 843

BÁNYÁSZ T. & KOVÁCS T. Altered [^{3}H]ouabain binding to cardiac muscle in insulin-dependent and non-insulin-dependent diabetic rats 65

BARRIONUEVO M. *see* CAMPOS M. S., BARRIONUEVO M., ALFÉREZ M. J. M., GÓMEZ-AYALA A. E., RODRÍGUEZ-MATAS M. C., LOPEZ ALIAGA I. & LISBONA F. Interactions among iron, calcium, phosphorus and magnesium in the nutritionally iron-deficient rat 771

BARTOLI E. *see* ROMANO G., FAVRET G., DAMATO R. & BARTOLI E. Proximal reabsorption with changing tubular fluid inflow in rat nephrons 35

BENNETT A. R. *see* CLOUGH G. F., BENNETT A. R. & CHURCH M. K. Measurement of nitric oxide concentration in human skin *in vivo* using dermal microdialysis 431

BERGGREEN P. *see* MALTBÆK J. S., GRØNDAHL M. L., BERGGREEN P., NIELSEN C. G., THORBØLL J. E., SKADHAUGE E. & HANSEN M. B. Secretory response to cholera toxin in the porcine jejunum under different types of general anaesthesia 523

BLOOM N. *see* SCHEINOWITZ M., KOTLYAR A., ZIMAND S., OHAD D., LEIBOVITZ I., BLOOM N., GOLDBERG I., NASS D., ENGELBERG S., SAVION N. & ELDAR M. Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats 585

BOHNERT B., WARD S. A. & WHIPP B. J. Effects of prior arm exercise on pulmonary gas exchange kinetics during high-intensity leg exercise in humans 557

BOYD R. D. H. *see* TEIN M. S. C., BREEN S. A., LOVEDAY B. E., DEVLIN H., BALMENT R. J., BOYD R. D. H., SIBLEY C. P. & GARLAND H. O. Bone mineral density and composition in rat pregnancy: effects of streptozotocin-induced diabetes mellitus and insulin replacement 165

BOYD R. D. H. *see* WARD B. S., GLAZIER J. D., SIBLEY C. P. & BOYD R. D. H. Site of catecholamine modulation of feto-maternal electric potential difference in the pig 361

BOYETT M. R. *see* MCMORN S. O., HARRISON S. M. & BOYETT M. R. The effect of temperature on the rate-dependent decrease of the rat ventricular calcium current 49

BREEN S. A. *see* TEIN M. S. C., BREEN S. A., LOVEDAY B. E., DEVLIN H., BALMENT R. J., BOYD R. D. H., SIBLEY C. P. & GARLAND H. O. Bone mineral density and composition in rat pregnancy: effects of streptozotocin-induced diabetes mellitus and insulin replacement 165

BRYANT S. M. *see* MAIN M. C., BRYANT S. M. & HART G. Regional differences in action potential characteristics and membrane currents of guinea-pig left ventricular myocytes 747

BUCHAN W. *see* NICODEMO M. L. F., SCOTT D., BUCHAN W., DUNCAN A. & ROBINS S. P. Effects of variations in dietary calcium and phosphorus supply on plasma and bone osteocalcin concentrations and bone mineralization in growing pigs 659

CALONGE M. L., CANO M. & ILUNDÁIN A. A. K^+ transport in colonocytes isolated from the chick: effect of anisosmotic buffers 629

CALVERT P. A., HECK P. M. & EDWARDS A. V. Autonomic control of submandibular protein secretion in the anaesthetized calf 545

CAMPOS M. S., BARRIONUEVO M., ALFÉREZ M. J. M., GÓMEZ-AYALA A. E., RODRÍGUEZ-MATAS M. C., LOPEZ ALIAGA I. & LISBONA F. Interactions among iron, calcium, phosphorus and magnesium in the nutritionally iron-deficient rat 771

CANO M. *see* CALONGE M. L., CANO M. & ILUNDÁIN A. A. K^+ transport in colonocytes isolated from the chick: effect of anisosmotic buffers 629

CARRUTHERS A. *see* HEARD K. S., DIGUETTE M., HEARD A. C. & CARRUTHERS A. Membrane-bound glyceraldehyde-3-phosphate dehydrogenase and multiphasic erythrocyte sugar transport 195

CARVALHO E. G., FRANCI C. R., ANTUNES-RODRIGUES J., GUTKOWSKA J. & FAVARETTO A. L. V. Salt overload does not modify plasma atrial natriuretic peptide or vasopressin during pregnancy in rats 503

CHAMBERS P. Book Review: *An Introduction to Molecular Biology*, edited by Robert C. Tait 875

CHEESEMAN C. I. & O'NEILL D. Basolateral D-glucose transport activity along the crypt–villus axis in rat jejunum and upregulation induced by gastric inhibitory peptide and glucagon-like peptide-2 605

CHILIBECK P. D., PATERSON D. H., MCCREARY C. R., MARSH G. D., CUNNINGHAM D. A. & THOMPSON R. T. The effects of age on kinetics of oxygen uptake and phosphocreatine in humans during exercise 107

CHURCH M. K. *see* CLOUGH G. F., BENNETT A. R. & CHURCH M. K. Measurement of nitric oxide concentration in human skin *in vivo* using dermal microdialysis 431

CLARKE L. & SYMONDS M. E. Thermoregulation in newborn lambs: influence of feeding and ambient temperature on brown adipose tissue 651

CLOUGH G. F., BENNETT A. R. & CHURCH M. K. Measurement of nitric oxide concentration in human skin *in vivo* using dermal microdialysis 431

COIMBRA C. C. *see* REIS F. M., RIBEIRO-DE-OLIVEIRA A. JR, MACHADO L. J. C., GUERRA R. M., REIS A. M. & COIMBRA C. C. Plasma prolactin and glucose alterations induced by surgical stress: a single or dual response? 1

COLLINS T. *see* CONLON K., COLLINS T. & KIDD C. The role of nitric oxide in the control by the vagal nerves of the heart of the ferret 469

CONLON K., COLLINS T. & KIDD C. The role of nitric oxide in the control by the vagal nerves of the heart of the ferret 469

COOKE J. P. *see* MAXWELL A. J., TSAO P. S. & COOKE J. P. Modulation of the nitric oxide synthase pathway in atherosclerosis 573

COOKLIN M., WALLIS W. R. J., SHERIDAN D. J. & FRY C. H. Conduction velocity and gap junction resistance in hypertrophied, hypoxic guinea-pig left ventricular myocardium 763

COTTRELL D. F., JONES A. J. & POTTER K. E. Gas handling in the caecum of the horse 397

CUNNINGHAM D. A. *see* CHILIBECK P. D., PATERSON D. H., MCCREARY C. R., MARSH G. D., CUNNINGHAM D. A. & THOMPSON R. T. The effects of age on kinetics of oxygen uptake and phosphocreatine in humans during exercise 107

DAMATO R. *see* ROMANO G., FAVRET G., DAMATO R. & BARTOLI E. Proximal reabsorption with changing tubular fluid inflow in rat nephrons 35

DAY J. P. *see* KIBBLE J. D., AUDSLEY N., DAY J. P. & GREEN R. A new protocol for the measurement of picomole quantities of magnesium in rat renal tubular fluid 11

DE HAAN A. The influence of stimuation frequency on force–velocity characteristics of *in situ* rat medial gastrocnemius muscle 77

DEL FABBRO M. An improved technique for studying pleural fluid pressure and composition in rabbits 435

DEMPSTER D. W. *see* MOONGA B. S. & DEMPSTER D. W. Effects of peptide fragments of protein kinase C on isolated rat osteoclasts 717

DEVÉS R., ANGELO S. & ROJAS A. M. System y^+L: the broad scope and cation modulated amino acid transporter 211

DEVLIN H. *see* TEIN M. S. C., BREEN S. A., LOVEDAY B. E., DEVLIN H., BALMENT R. J., BOYD R. D. H., SIBLEY C. P. & GARLAND H. O. Bone mineral density and composition in rat pregnancy: effects of streptozotocin-induced diabetes mellitus and insulin replacement 165

DIGUETTE M. *see* HEARD K. S., DIGUETTE M., HEARD A. C. & CARRUTHERS A. Membrane-bound glyceraldehyde-3-phosphate dehydrogenase and multiphasic erythrocyte sugar transport 195

DIMALINE R. *see* DJALI P. K., DIMALINE R. & DOCKRAY G. J. Novel form of L-aromatic amino acid decarboxylase mRNA in rat antral mucosa 617

DJALI P. K., DIMALINE R. & DOCKRAY G. J. Novel form of L-aromatic amino acid decarboxylase mRNA in rat antral mucosa 617

DOBASHI Y., KANNO T., SUGA S., SAITO Y. & WAKUI M. Regulation of spontaneous rhythmic contractions in rat pregnant myometrium by corticotrophin-releasing factor 639

DOCKRAY G. J. *see* DJALI P. K., DIMALINE R. & DOCKRAY G. J. Novel form of L-aromatic amino acid decarboxylase mRNA in rat antral mucosa 617

DRINKHILL M. J. *see* NOBLE B. J., DRINKHILL M. J., MYERS D. S. & HAINSWORTH R. Blood mobilization from the liver of the anaesthetized dog 513

DUNCAN A. *see* NICODEMO M. L. F., SCOTT D., BUCHAN W., DUNCAN A. & ROBINS S. P. Effects of variations in dietary calcium and phosphorus supply on plasma and bone osteocalcin concentrations and bone mineralization in growing pigs 659

EARM Y. E. *see* LEE S. H., HO W.-K. & EARM Y. E. Effects of intracellular Na^+, Mg^{2+} and metabolites on Ca^{2+}-activated K^+ channels in pulmonary and ear arterial smooth muscle cells of the rabbit 707

EBEIGBE A. B. *see* OLELE N. E., EHIGIEGBA A. E. & EBEIGBE A. B. Vasorelaxant effect of thiopentone in isolated human epigastric arteries 461

EDGERTON V. R. *see* ROY R. R., PIEROTTI D. J., BALDWIN K. M., ZHONG H., HODGSON J. A. & EDGERTON V. R. Cyclical passive stretch influences the mechanical properties of the inactive cat soleus 377

EDWARDS A. V. *see* HANNA S. J. & EDWARDS A. V. The role of nitric oxide in the control of protein secretion in the parotid gland of anaesthetized sheep 533

EDWARDS A. V. *see* CALVERT P. A., HECK P. M. & EDWARDS A. V. Autonomic control of submandibular protein secretion in the anaesthetized calf 545

EHIGIEGBA A. E. *see* OLELE N. E., EHIGIEGBA A. E. & EBEIGBE A. B. Vasorelaxant effect of thiopentone in isolated human epigastric arteries 461

EKSTRÖM J. Non-adrenergic, non-cholinergic reflex secretion of parotid saliva in rats elicited by mastication and acid applied on the tongue 697

EKSTRÖM J. & EKSTRÖM P.-F. Depletion of acinar secretory granules in the ferret parotid gland: effects of substance P and vasoactive intestinal peptide 727

EKSTRÖM P.-F. *see* EKSTRÖM J. & EKSTRÖM P.-F. Depletion of acinar secretory granules in the ferret parotid gland: effects of substance P and vasoactive intestinal peptide 727

ELDAR M. *see* SCHEINOWITZ M., KOTLYAR A., ZIMAND S., OHAD D., LEIBOVITZ I., BLOOM N., GOLDBERG I., NASS D., ENGELBERG S., SAVION N. & ELDAR M. Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats 585

ENGELBERG S. *see* SCHEINOWITZ M., KOTLYAR A., ZIMAND S., OHAD D., LEIBOVITZ I., BLOOM N., GOLDBERG I., NASS D., ENGELBERG S., SAVION N. & ELDAR M. Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats 585

EVANS A. M. *see* BAKHRAMOV A., EVANS A. M. & KOZLOWSKI R. Z. Differential effects of hypoxia on the intracellular Ca^{2+} concentration of myocytes isolated from different regions of the rat pulmonary arterial tree 337

FAVARETTO A. L. V. *see* CARVALHO E. G., FRANCI C. R., ANTUNES-RODRIGUES J., GUTKOWSKA J. & FAVARETTO A. L. V. Salt overload does not modify plasma atrial natriuretic peptide or vasopressin during pregnancy in rats 503

FAVRET G. *see* ROMANO G., FAVRET G., DAMATO R. & BARTOLI E. Proximal reabsorption with changing tubular fluid inflow in rat nephrons 35

FAWCETT J. M., HARRISON S. M. & ORCHARD C. H. A method for reversible permeabilization of isolated rat ventricular myocytes 293

FILLAUT M. *see* LOSSEC G., LEBRETON Y., HULIN J.-C., FILLAUT M. & HERPIN P. Age-related changes in oxygen and nutrient uptake by hindquarters in newborn pigs during cold-induced shivering 793

FILLENZ M. & LOWRY J. P. The relation between local cerebral blood flow and extracellular glucose concentration in rat striatum 233

FORSLING M. L., MONTGOMERY H., HALPIN D., WINDLE R. J. & TREACHER D. F. Daily patterns of secretion of neurohypophysial hormones in man: effect of age 409

FORSLING M. L. Book Review: *Fetus and Neonate, Physiology and Clinical Applications 4: Body Fluids and Kidney Function*, edited by Robert A. Brace, Mark A. Hanson and Charles H. Rodeck 705

FRANCI C. R. *see* CARVALHO E. G., FRANCI C. R., ANTUNES-RODRIGUES J., GUTKOWSKA J. & FAVARETTO A. L. V. Salt overload does not modify plasma atrial natriuretic peptide or vasopressin during pregnancy in rats 503

FRY C. H. *see* COOKLIN M., WALLIS W. R. J., SHERIDAN D. J. & FRY C. H. Conduction velocity and gap junction resistance in hypertrophied, hypoxic guinea-pig left ventricular myocardium 763

GÄBEL G. *see* LEONHARD-MAREK S., GÄBEL G. & MARTENS H. Effects of short chain fatty acids and carbon dioxide on magnesium transport across sheep rumen epithelium 155

GALLOWAY S. D. R. & MAUGHAN R. J. The effects of substrate and fluid provision on thermoregulatory, cardiorespiratory and metabolic responses to prolonged exercise in a cold environment in man 419

GARLAND H. O. *see* TEIN M. S. C., BREEN S. A., LOVEDAY B. E., DEVLIN H., BALMENT R. J., BOYD R. D. H., SIBLEY C. P. & GARLAND H. O. Bone mineral density and composition in rat pregnancy: effects of streptozotocin-induced diabetes mellitus and insulin replacement 165

GATTULLO D. *see* PAGLIARO P., GATTULLO D., LINDEN R. J., LOSANO G. & WESTERHOF N. Systolic coronary flow impediment in the dog: role of ventricular pressure and contractility 821

GLAZIER J. D. *see* WARD B. S., GLAZIER J. D., SIBLEY C. P. & BOYD R. D. H. Site of catecholamine modulation of feto-maternal electric potential difference in the pig 361

GOLDBERG I. *see* SCHEINOWITZ M., KOTLYAR A., ZIMAND S., OHAD D., LEIBOVITZ I., BLOOM N., GOLDBERG I., NASS D., ENGELBERG S., SAVION N. & ELDAR M. Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats 585

GÓMEZ-AYALA A. E. *see* CAMPOS M. S., BARRIONUEVO M., ALFÉREZ M. J. M., GÓMEZ-AYALA A. E., RODRÍGUEZ-MATAS M. C., LOPEZ ALIAGA I. & LISBONA F. Interactions among iron, calcium, phosphorus and magnesium in the nutritionally iron-deficient rat 771

GREEN R. *see* KIBBLE J. D., AUDSLEY N., DAY J. P. & GREEN R. A new protocol for the measurement of picomole quantities of magnesium in rat renal tubular fluid 11

GREENHAFF P. L. *see* WELLER A. S., GREENHAFF P. L. & MACDONALD I. A. Physiological responses to moderate cold stress in man and the influence of prior prolonged exhaustive exercise 679

GROHÉ C. *see* MEYER R., LINZ K. W., SURGES R., MEINARDUS S., VEES J., HOFFMANN A., WINDHOLZ O. & GROHÉ C. Rapid modulation of L-type calcium current by acutely applied oestrogens in isolated cardiac myocytes from human, guinea-pig and rat 305

GRØNDAHL M. L. *see* MALTBÆK J. S., GRØNDAHL M. L., BERGGREEN P., NIELSEN C. G., THORBØLL J. E., SKADHAUGE E. & HANSEN M. B. Secretory response to cholera toxin in the porcine jejunum under different types of general anaesthesia 523

GROTTEL K., KRUTKI P. & MRÓWCZYŃSKI W. Triple projections of neurones located in S1 and S2 segments of the cat spinal cord to the C6 segment, the cerebellum and the reticular formation 737

GUERRA R. M. *see* REIS F. M., RIBEIRO-DE-OLIVEIRA A. JR, MACHADO L. J. C., GUERRA R. M., REIS A. M. & COIMBRA C. C. Plasma prolactin and glucose alterations induced by surgical stress: a single or dual response? 1

GUTKOWSKA J. *see* CARVALHO E. G., FRANCI C. R., ANTUNES-RODRIGUES J., GUTKOWSKA J. & FAVARETTO A. L. V. Salt overload does not modify plasma atrial natriuretic peptide or vasopressin during pregnancy in rats 503

HAINSWORTH R. *see* NOBLE B. J., DRINKHILL M. J., MYERS D. S. & HAINSWORTH R. Blood mobilization from the liver of the anaesthetized dog 513

HALL G. M. Book Review: *Anaesthetic Physiology and Pharmacology*, edited by W. McCaughey, R. S. J. Clarke, J. P. H. Fee and W. F. M. Wallace 119

HALPIN D. *see* FORSLING M. L., MONTGOMERY H., HALPIN D., WINDLE R. J. & TREACHER D. F. Daily patterns of secretion of neurohypophysial hormones in man: effect of age 409

HANNA S. J. & EDWARDS A. V. The role of nitric oxide in the control of protein secretion in the parotid gland of anaesthetized sheep 533

HANSEN M. B. *see* MALTBÆK J. S., GRØNDAHL M. L., BERGGREEN P., NIELSEN C. G., THORBØLL J. E., SKADHAUGE E. & HANSEN M. B. Secretory response to cholera toxin in the porcine jejunum under different types of general anaesthesia 523

HARRIS R. C. *see* JARVIS S. M. & HARRIS R. C. Adenosine and hypoxanthine transport in horse erythrocytes: evidence for a polymorphism in the transport of hypoxanthine via a sodium-dependent cotransporter 203

HARRISON S. M. *see* FAWCETT J. M., HARRISON S. M. & ORCHARD C. H. A method for reversible permeabilization of isolated rat ventricular myocytes 293

HARRISON S. M. *see* LANCASTER M. K. & HARRISON S. M. Changes in contraction, cytosolic Ca^{2+} and pH during metabolic inhibition and upon restoration of mitochondrial respiration in rat ventricular myocytes 349

HARRISON S. M. *see* MCMORN S. O., HARRISON S. M. & BOYETT M. R. The effect of temperature on the rate-dependent decrease of the rat ventricular calcium current 49

HART G. *see* MAIN M. C., BRYANT S. M. & HART G. Regional differences in action potential characteristics and membrane currents of guinea-pig left ventricular myocytes 747

HEARD A. C. *see* HEARD K. S., DIGUETTE M., HEARD A. C. & CARRUTHERS A. Membrane-bound glyceraldehyde-3-phosphate dehydrogenase and multiphasic erythrocyte sugar transport 195

HEARD K. S., DIGUETTE M., HEARD A. C. & CARRUTHERS A. Membrane-bound glyceraldehyde-3-phosphate dehydrogenase and multiphasic erythrocyte sugar transport 195

HECK P. M. *see* CALVERT P. A., HECK P. M. & EDWARDS A. V. Autonomic control of submandibular protein secretion in the anaesthetized calf 545

HERPIN P. *see* LOSSEC G., HERPIN P. & LE DIVIDICH J. Thermoregulatory responses of the newborn pig during experimentally induced hypothermia and rewarming 667

HERPIN P. *see* LOSSEC G., LEBRETON Y., HULIN J.-C., FILLAUT M. & HERPIN P. Age-related changes in oxygen and nutrient uptake by hindquarters in newborn pigs during cold-induced shivering 793

HO W.-K. *see* LEE S. H., HO W.-K. & EARM Y. E. Effects of intracellular Na^+, Mg^{2+} and metabolites on Ca^{2+}-activated K^+ channels in pulmonary and ear arterial smooth muscle cells of the rabbit 707

HODGSON J. A. *see* ROY R. R., PIEROTTI D. J., BALDWIN K. M., ZHONG H., HODGSON J. A. & EDGERTON V. R. Cyclical passive stretch influences the mechanical properties of the inactive cat soleus 377

HOFFMANN A. *see* MEYER R., LINZ K. W., SURGES R., MEINARDUS S., VEES J., HOFFMANN A., WINDHOLZ O. & GROHÉ C. Rapid modulation of L-type calcium current by acutely applied oestrogens in isolated cardiac myocytes from human, guinea-pig and rat 305

HOOPER S. B. Role of luminal volume changes in the increase in pulmonary blood flow at birth in sheep 833

HULIN J.-C. *see* LOSSEC G., LEBRETON Y., HULIN J.-C., FILLAUT M. & HERPIN P. Age-related changes in oxygen and nutrient uptake by hindquarters in newborn pigs during cold-induced shivering 793

ILUNDÁIN A. A. *see* CALONGE M. L., CANO M. & ILUNDÁIN A. A. K^+ transport in colonocytes isolated from the chick: effect of anisosmotic buffers 629

ITOH F. *see* ROSE M. T., ITOH F. & TAKAHASHI Y. Effect of glucose-dependent insulinotropic polypeptide on whole-body glucose utilization in sheep 783

JARVIS S. M. & HARRIS R. C. Adenosine and hypoxanthine transport in horse erythrocytes: evidence for a polymorphism in the transport of hypoxanthine via a sodium-dependent cotransporter 203

JONES A. J. *see* COTTRELL D. F., JONES A. J. & POTTER K. E. Gas handling in the caecum of the horse 397

JUNG C. Y. Proteins that interact with facilitative glucose transporters: implication for function 267

KANNO T. *see* DOBASHI Y., KANNO T., SUGA S., SAITO Y. & WAKUI M. Regulation of spontaneous rhythmic contractions in rat pregnant myometrium by corticotrophin-releasing factor 639

KATZ P. S. Comparison of extrinsic and intrinsic neuromodulation in two central pattern generator circuits in invertebrates 281

KENNEDY H. J. Intracellular Mg^{2+} regulation in voltage-clamped *Helix aspersa* neurones measured with mag-fura-2 and Mg^{2+}-sensitive microelectrodes 449

KIBBLE J. D., AUDSLEY N., DAY J. P. & GREEN R. A new protocol for the measurement of picomole quantities of magnesium in rat renal tubular fluid 11

KIDD C. *see* CONLON K., COLLINS T. & KIDD C. The role of nitric oxide in the control by the vagal nerves of the heart of the ferret 469

KLUG G. A. *see* WILLIAMS J. H., WARD C. W., SPANGENBURG E. E., NELSON R., STAVRIANEAS S. & KLUG G. A. Glucose 6-phosphate alters rat skeletal muscle contractile apparatus and sarcoplasmic reticulum function 489

KOTLYAR A. *see* SCHEINOWITZ M., KOTLYAR A., ZIMAND S., OHAD D., LEIBOVITZ I., BLOOM N., GOLDBERG I., NASS D., ENGELBERG S., SAVION N. & ELDAR M. Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats 585

KOVÁCS L. *see* SZIGETI G., RUSZNÁK Z., KOVÁCS L. & PAPP Z. Calcium-activated transient membrane currents are carried mainly by chloride ions in isolated atrial, ventricular and Purkinje cells of rabbit heart 137

KOVÁCS T. *see* BÁNYÁSZ T. & KOVÁCS T. Altered [^{3}H]ouabain binding to cardiac muscle in insulin-dependent and non-insulin-dependent diabetic rats 65

KOZLOWSKI R. Z. *see* BAKHRAMOV A., EVANS A. M. & KOZLOWSKI R. Z. Differential effects of hypoxia on the intracellular Ca^{2+} concentration of myocytes isolated from different regions of the rat pulmonary arterial tree 337

KRÄMER R. Mitochondrial carrier proteins can reversibly change their transport mode: the cases of the aspartate/glutamate and the phosphate carrier 259

KRISTEK F. Long-term administration of L-arginine did not influence blood pressure, heart rate, cardiac hypertrophy or arterial wall thickness of spontaneously hypertensive rats 595

KRUPKA R. M. Channelling free energy into work in biological processes 243

KRUTKI P. *see* GROTTEL K., KRUTKI P. & MRÓWCZYŃSKI W. Triple projections of neurones located in S1 and S2 segments of the cat spinal cord to the C6 segment, the cerebellum and the reticular formation 737

KULCZYKOWSKA E. Effects of arginine vasotocin, isotocin and melatonin on blood pressure in the conscious atlantic cod (*Gadus morhua*): hormonal interactions? 809

LAMANO CARVALHO T. L. *see* ALMEIDA S. A., ANSELMO-FRANCI J. A., ROSA E SILVA A. A. & LAMANO CARVALHO T. L. Chronic intermittent immobilization of male rats throughout sexual development: a stress protocol 701

LANCASTER M. K. & HARRISON S. M. Changes in contraction, cytosolic Ca^{2+} and pH during metabolic inhibition and upon restoration of mitochondrial respiration in rat ventricular myocytes 349

LE DIVIDICH J. *see* LOSSEC G., HERPIN P. & LE DIVIDICH J. Thermoregulatory responses of the newborn pig during experimentally induced hypothermia and rewarming 667

LEBRETON Y. *see* LOSSEC G., LEBRETON Y., HULIN J.-C., FILLAUT M. & HERPIN P. Age-related changes in oxygen and nutrient uptake by hindquarters in newborn pigs during cold-induced shivering 793

LEE S. H., HO W.-K. & EARM Y. E. Effects of intracellular Na^+, Mg^{2+} and metabolites on Ca^{2+}-activated K^+ channels in pulmonary and ear arterial smooth muscle cells of the rabbit 707

LEGUENNEC J.-Y. *see* SPINDLER A. J., NOBLE S. J., NOBLE D. & LEGUENNEC J.-Y. The effects of sodium substitution on currents determining the resting potential in guinea-pig ventricular cells 121

LEIBOVITZ I. *see* SCHEINOWITZ M., KOTLYAR A., ZIMAND S., OHAD D., LEIBOVITZ I., BLOOM N., GOLDBERG I., NASS D., ENGELBERG S., SAVION N. & ELDAR M. Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats 585

LEONHARD-MAREK S., GÄBEL G. & MARTENS H. Effects of short chain fatty acids and carbon dioxide on magnesium transport across sheep rumen epithelium 155

LINDEN R. J. *see* PAGLIARO P., GATTULLO D., LINDEN R. J., LOSANO G. & WESTERHOF N. Systolic coronary flow impediment in the dog: role of ventricular pressure and contractility 821

LINZ K. W. *see* MEYER R., LINZ K. W., SURGES R., MEINARDUS S., VEES J., HOFFMANN A., WINDHOLZ O. & GROHÉ C. Rapid modulation of L-type calcium current by acutely applied oestrogens in isolated cardiac myocytes from human, guinea-pig and rat 305

LISBONA F. *see* CAMPOS M. S., BARRIONUEVO M., ALFÉREZ M. J. M., GÓMEZ-AYALA A. E., RODRÍGUEZ-MATAS M. C., LOPEZ ALIAGA I. & LISBONA F. Interactions among iron, calcium, phosphorus and magnesium in the nutritionally iron-deficient rat 771

LIU S. J. & STIMERS J. R. Calcium-inhibitable current in cultured embryonic chick cardiac myocytes: possibly via a novel chloride channel 323

LOPEZ ALIAGA I. *see* CAMPOS M. S., BARRIONUEVO M., ALFÉREZ M. J. M., GÓMEZ-AYALA A. E., RODRÍGUEZ-MATAS M. C., LOPEZ ALIAGA I. & LISBONA F. Interactions among iron, calcium, phosphorus and magnesium in the nutritionally iron-deficient rat 771

LOSANO G. *see* PAGLIARO P., GATTULLO D., LINDEN R. J., LOSANO G. & WESTERHOF N. Systolic coronary flow impediment in the dog: role of ventricular pressure and contractility 821

LOSSEC G., HERPIN P. & LE DIVIDICH J. Thermoregulatory responses of the newborn pig during experimentally induced hypothermia and rewarming 667

LOSSEC G., LEBRETON Y., HULIN J.-C., FILLAUT M. & HERPIN P. Age-related changes in oxygen and nutrient uptake by hindquarters in newborn pigs during cold-induced shivering 793

LOVEDAY B. E. *see* TEIN M. S. C., BREEN S. A., LOVEDAY B. E., DEVLIN H., BALMENT R. J., BOYD R. D. H., SIBLEY C. P. & GARLAND H. O. Bone mineral density and composition in rat pregnancy: effects of streptozotocin-induced diabetes mellitus and insulin replacement 165

LOWRY J. P. *see* FILLENZ M. & LOWRY J. P. The relation between local cerebral blood flow and extracellular glucose concentration in rat striatum 233

MCCREARY C. R. *see* CHILIBECK P. D., PATERSON D. H., MCCREARY C. R., MARSH G. D., CUNNINGHAM D. A. & THOMPSON R. T. The effects of age on kinetics of oxygen uptake and phosphocreatine in humans during exercise 107

MACDERMOTT M. *see* MCGUIRE M. & MACDERMOTT M. The influence of streptozotocin-induced diabetes and the antihyperglycaemic agent metformin on the contractile characteristics and the membrane potential of the rat diaphragm 481

MCDONAGH M. J. N. *see* SANTELLO M. & MCDONAGH M. J. N. The control of timing and amplitude of EMG activity in landing movements in humans 857

MACDONALD I. A. *see* WELLER A. S., GREENHAFF P. L. & MACDONALD I. A. Physiological responses to moderate cold stress in man and the influence of prior prolonged exhaustive exercise 679

MCGUIRE M. & MACDERMOTT M. The influence of streptozotocin-induced diabetes and the anti-hyperglycaemic agent metformin on the contractile characteristics and the membrane potential of the rat diaphragm 481

MACHADO L. J. C. *see* REIS F. M., RIBEIRO-DE-OLIVEIRA A. JR, MACHADO L. J. C., GUERRA R. M., REIS A. M. & COIMBRA C. C. Plasma prolactin and glucose alterations induced by surgical stress: a single or dual response? 1

MCKINLEY M. J. Book Review: *Eckert Animal Physiology: Mechanisms and Adaptations*, 4th edn, by D. Randall, W. Burggren and K. French 571

MCMORN S. O., HARRISON S. M. & BOYETT M. R. The effect of temperature on the rate-dependent decrease of the rat ventricular calcium current 49

MACPHEE P. J. Fluid uptake by the renal medullary vasa recta: an estimate based on a quantitative analysis of the distribution of fenestrae in the vasa recta of young Sprague–Dawley rats 23

MAGANARIS C. N., BALTZOPOULOS V. & SARGEANT A. J. Differences in human antagonistic ankle dorsiflexor coactivation between legs; can they explain the moment deficit in the weaker plantarflexor leg? 843

MAIN M. C., BRYANT S. M. & HART G. Regional differences in action potential characteristics and membrane currents of guinea-pig left ventricular myocytes 747

MALTBÆK J. S., GRØNDAHL M. L., BERGGREEN P., NIELSEN C. G., THORBØLL J. E., SKADHAUGE E. & HANSEN M. B. Secretory response to cholera toxin in the porcine jejunum under different types of general anaesthesia 523

MARSH G. D. *see* CHILIBECK P. D., PATERSON D. H., MCCREARY C. R., MARSH G. D., CUNNINGHAM D. A. & THOMPSON R. T. The effects of age on kinetics of oxygen uptake and phosphocreatine in humans during exercise 107

MARTENS H. *see* LEONHARD-MAREK S., GÄBEL G. & MARTENS H. Effects of short chain fatty acids and carbon dioxide on magnesium transport across sheep rumen epithelium 155

MAUGHAN R. J. *see* GALLOWAY S. D. R. & MAUGHAN R. J. The effects of substrate and fluid provision on thermoregulatory, cardiorespiratory and metabolic responses to prolonged exercise in a cold environment in man 419

MAXWELL A. J., TSAO P. S. & COOKE J. P. Modulation of the nitric oxide synthase pathway in atherosclerosis 573

MEINARDUS S. *see* MEYER R., LINZ K. W., SURGES R., MEINARDUS S., VEES J., HOFFMANN A., WINDHOLZ O. & GROHÉ C. Rapid modulation of L-type calcium current by acutely applied oestrogens in isolated cardiac myocytes from human, guinea-pig and rat 305

MEYER R., LINZ K. W., SURGES R., MEINARDUS S., VEES J., HOFFMANN A., WINDHOLZ O. & GROHÉ C. Rapid modulation of L-type calcium current by acutely applied oestrogens in isolated cardiac myocytes from human, guinea-pig and rat 305

MONTGOMERY H. *see* FORSLING M. L., MONTGOMERY H., HALPIN D., WINDLE R. J. & TREACHER D. F. Daily patterns of secretion of neurohypophysial hormones in man: effect of age 409

MOONGA B. S. & DEMPSTER D. W. Effects of peptide fragments of protein kinase C on isolated rat osteoclasts 717

MRÓWCZYŃSKI W. *see* GROTTEL K., KRUTKI P. & MRÓWCZYŃSKI W. Triple projections of neurones located in S1 and S2 segments of the cat spinal cord to the C6 segment, the cerebellum and the reticular formation 737

MYERS D. S. *see* NOBLE B. J., DRINKHILL M. J., MYERS D. S. & HAINSWORTH R. Blood mobilization from the liver of the anaesthetized dog 513

NAFTALIN R. J. Evidence from temperature studies that the human erythrocyte hexose transporter has a transient memory of its dissociated ligands 253

NASS D. *see* SCHEINOWITZ M., KOTLYAR A., ZIMAND S., OHAD D., LEIBOVITZ I., BLOOM N., GOLDBERG I., NASS D., ENGELBERG S., SAVION N. & ELDAR M. Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats 585

NELSON R. *see* WILLIAMS J. H., WARD C. W., SPANGENBURG E. E., NELSON R., STAVRIANEAS S. & KLUG G. A. Glucose 6-phosphate alters rat skeletal muscle contractile apparatus and sarcoplasmic reticulum function 489

NICODEMO M. L. F., SCOTT D., BUCHAN W., DUNCAN A. & ROBINS S. P. Effects of variations in dietary calcium and phosphorus supply on plasma and bone osteocalcin concentrations and bone mineralization in growing pigs 659

NICOL D. J. *see* WOOD L., NICOL D. J. & THULIN C. E. S. The effects of skin brushing on H reflex amplitude in normal human subjects 175

NIELSEN C. G. *see* MALTBÆK J. S., GRØNDAHL M. L., BERGGREEN P., NIELSEN C. G., THORBØLL J. E., SKADHAUGE E. & HANSEN M. B. Secretory response to cholera toxin in the porcine jejunum under different types of general anaesthesia 523

NOBLE B. J., DRINKHILL M. J., MYERS D. S. & HAINSWORTH R. Blood mobilization from the liver of the anaesthetized dog 513

NOBLE D. *see* SPINDLER A. J., NOBLE S. J., NOBLE D. & LEGUENNEC J.-Y. The effects of sodium substitution on currents determining the resting potential in guinea-pig ventricular cells 121

NOBLE S. J. *see* SPINDLER A. J., NOBLE S. J., NOBLE D. & LEGUENNEC J.-Y. The effects of sodium substitution on currents determining the resting potential in guinea-pig ventricular cells 121

OHAD D. *see* SCHEINOWITZ M., KOTLYAR A., ZIMAND S., OHAD D., LEIBOVITZ I., BLOOM N., GOLDBERG I., NASS D., ENGELBERG S., SAVION N. & ELDAR M. Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats 585

OLELE N. E., EHIGIEGBA A. E. & EBEIGBE A. B. Vasorelaxant effect of thiopentone in isolated human epigastric arteries 461

ORCHARD C. H. *see* FAWCETT J. M., HARRISON S. M. & ORCHARD C. H. A method for reversible permeabilization of isolated rat ventricular myocytes 293

O'GORMAN R. *see* BAKER G. F., O'GORMAN R. & BAKER P. Glucose transport inhibitors protect against 1,2-cyclohexanedione-produced potassium loss from human red blood cells 239

O'NEILL D. *see* CHEESEMAN C. I. & O'NEILL D. Basolateral D-glucose transport activity along the crypt–villus axis in rat jejunum and upregulation induced by gastric inhibitory peptide and glucagon-like peptide-2 605

PAGLIARO P., GATTULLO D., LINDEN R. J., LOSANO G. & WESTERHOF N. Systolic coronary flow impediment in the dog: role of ventricular pressure and contractility 821

PAPP Z. *see* SZIGETI G., RUSZNÁK Z., KOVÁCS L. & PAPP Z. Calcium-activated transient membrane currents are carried mainly by chloride ions in isolated atrial, ventricular and Purkinje cells of rabbit heart 137

PATERSON D. H. *see* CHILIBECK P. D., PATERSON D. H., MCCREARY C. R., MARSH G. D., CUNNINGHAM D. A. & THOMPSON R. T. The effects of age on kinetics of oxygen uptake and phosphocreatine in humans during exercise 107

PIEROTTI D. J. *see* ROY R. R., PIEROTTI D. J., BALDWIN K. M., ZHONG H., HODGSON J. A. & EDGERTON V. R. Cyclical passive stretch influences the mechanical properties of the inactive cat soleus 377

POTTER K. E. *see* COTTRELL D. F., JONES A. J. & POTTER K. E. Gas handling in the caecum of the horse 397

POULIN M. J. & ROBBINS P. A. Influence of cerebral blood flow on the ventilatory response to hypoxia in humans 95

RANATUNGA K. W. Temperature dependence of mechanical power output in mammalian (rat) skeletal muscle 371

REIS A. M. *see* REIS F. M., RIBEIRO-DE-OLIVEIRA A. JR, MACHADO L. J. C., GUERRA R. M., REIS A. M. & COIMBRA C. C. Plasma prolactin and glucose alterations induced by surgical stress: a single or dual response? 1

REIS F. M., RIBEIRO-DE-OLIVEIRA A. JR, MACHADO L. J. C., GUERRA R. M., REIS A. M. & COIMBRA C. C. Plasma prolactin and glucose alterations induced by surgical stress: a single or dual response? 1

RIBEIRO-DE-OLIVEIRA A. JR *see* REIS F. M., RIBEIRO-DE-OLIVEIRA A. JR, MACHADO L. J. C., GUERRA R. M., REIS A. M. & COIMBRA C. C. Plasma prolactin and glucose alterations induced by surgical stress: a single or dual response? 1

ROBBINS P. A. *see* POULIN M. J. & ROBBINS P. A. Influence of cerebral blood flow on the ventilatory response to hypoxia in humans 95

ROBINS S. P. *see* NICODEMO M. L. F., SCOTT D., BUCHAN W., DUNCAN A. & ROBINS S. P. Effects of variations in dietary calcium and phosphorus supply on plasma and bone osteocalcin concentrations and bone mineralization in growing pigs 659

RODRÍGUEZ-MATAS M. C. *see* CAMPOS M. S., BARRIONUEVO M., ALFÉREZ M. J. M., GÓMEZ-AYALA A. E., RODRÍGUEZ-MATAS M. C., LOPEZ ALIAGA I. & LISBONA F. Interactions among iron, calcium, phosphorus and magnesium in the nutritionally iron-deficient rat 771

ROJAS A. M. *see* DEVÉS R., ANGELO S. & ROJAS A. M. System y^+L: the broad scope and cation modulated amino acid transporter 211

ROMANO G., FAVRET G., DAMATO R. & BARTOLI E. Proximal reabsorption with changing tubular fluid inflow in rat nephrons 35

ROSA E SILVA A. A. *see* ALMEIDA S. A., ANSELMO-FRANCI J. A., ROSA E SILVA A. A. & LAMANO CARVALHO T. L. Chronic intermittent immobilization of male rats throughout sexual development: a stress protocol 701

ROSE M. T., ITOH F. & TAKAHASHI Y. Effect of glucose-dependent insulinotropic polypeptide on whole-body glucose utilization in sheep 783

ROY R. R., PIEROTTI D. J., BALDWIN K. M., ZHONG H., HODGSON J. A. & EDGERTON V. R. Cyclical passive stretch influences the mechanical properties of the inactive cat soleus 377

RUSZNÁK Z. *see* SZIGETI G., RUSZNÁK Z., KOVÁCS L. & PAPP Z. Calcium-activated transient membrane currents are carried mainly by chloride ions in isolated atrial, ventricular and Purkinje cells of rabbit heart 137

SAITO Y. *see* DOBASHI Y., KANNO T., SUGA S., SAITO Y. & WAKUI M. Regulation of spontaneous rhythmic contractions in rat pregnant myometrium by corticotrophin-releasing factor 639

SANTELLO M. & MCDONAGH M. J. N. The control of timing and amplitude of EMG activity in landing movements in humans 857

SARGEANT A. J. *see* MAGANARIS C. N., BALTZOPOULOS V. & SARGEANT A. J. Differences in human antagonistic ankle dorsiflexor coactivation between legs; can they explain the moment deficit in the weaker plantarflexor leg? 843

SAVION N. *see* SCHEINOWITZ M., KOTLYAR A., ZIMAND S., OHAD D., LEIBOVITZ I., BLOOM N., GOLDBERG I., NASS D., ENGELBERG S., SAVION N. & ELDAR M. Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats 585

SCHEINOWITZ M., KOTLYAR A., ZIMAND S., OHAD D., LEIBOVITZ I., BLOOM N., GOLDBERG I., NASS D., ENGELBERG S., SAVION N. & ELDAR M. Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats 585

SCOTT D. *see* NICODEMO M. L. F., SCOTT D., BUCHAN W., DUNCAN A. & ROBINS S. P. Effects of variations in dietary calcium and phosphorus supply on plasma and bone osteocalcin concentrations and bone mineralization in growing pigs 659

SHAFIK A. Electrocholecystogram: a study of the electromechanical activity of the gall bladder in a canine model 387

SHERIDAN D. J. *see* COOKLIN M., WALLIS W. R. J., SHERIDAN D. J. & FRY C. H. Conduction velocity and gap junction resistance in hypertrophied, hypoxic guinea-pig left ventricular myocardium 763

SIBLEY C. P. *see* TEIN M. S. C., BREEN S. A., LOVEDAY B. E., DEVLIN H., BALMENT R. J., BOYD R. D. H., SIBLEY C. P. & GARLAND H. O. Bone mineral density and composition in rat pregnancy: effects of streptozotocin-induced diabetes mellitus and insulin replacement 165

SIBLEY C. P. *see* WARD B. S., GLAZIER J. D., SIBLEY C. P. & BOYD R. D. H. Site of catecholamine modulation of feto-maternal electric potential difference in the pig 361

SKADHAUGE E. *see* MALTBÆK J. S., GRØNDAHL M. L., BERGGREEN P., NIELSEN C. G., THORBØLL J. E., SKADHAUGE E. & HANSEN M. B. Secretory response to cholera toxin in the porcine jejunum under different types of general anaesthesia 523

SPANGENBURG E. E. *see* WILLIAMS J. H., WARD C. W., SPANGENBURG E. E., NELSON R., STAVRIANEAS S. & KLUG G. A. Glucose 6-phosphate alters rat skeletal muscle contractile apparatus and sarcoplasmic reticulum function 489

SPINDLER A. J., NOBLE S. J., NOBLE D. & LEGUENNEC J.-Y. The effects of sodium substitution on currents determining the resting potential in guinea-pig ventricular cells 121

STAVRIANEAS S. *see* WILLIAMS J. H., WARD C. W., SPANGENBURG E. E., NELSON R., STAVRIANEAS S. & KLUG G. A. Glucose 6-phosphate alters rat skeletal muscle contractile apparatus and sarcoplasmic reticulum function 489

STEIN W. D. Kinetics of the P-glycoprotein, the multidrug transporter 221

STIMERS J. R. *see* LIU S. J. & STIMERS J. R. Calcium-inhibitable current in cultured embryonic chick cardiac myocytes: possibly via a novel chloride channel 323

SUGA S. *see* DOBASHI Y., KANNO T., SUGA S., SAITO Y. & WAKUI M. Regulation of spontaneous rhythmic contractions in rat pregnant myometrium by corticotrophin-releasing factor 639

SURGES R. *see* MEYER R., LINZ K. W., SURGES R., MEINARDUS S., VEES J., HOFFMANN A., WINDHOLZ O. & GROHÉ C. Rapid modulation of L-type calcium current by acutely applied oestrogens in isolated cardiac myocytes from human, guinea-pig and rat 305

SYMONDS M. E. *see* CLARKE L. & SYMONDS M. E. Thermoregulation in newborn lambs: influence of feeding and ambient temperature on brown adipose tissue 651

SZIGETI G., RUSZNÁK Z., KOVÁCS L. & PAPP Z. Calcium-activated transient membrane currents are carried mainly by chloride ions in isolated atrial, ventricular and Purkinje cells of rabbit heart 137

TAKAHASHI Y. *see* ROSE M. T., ITOH F. & TAKAHASHI Y. Effect of glucose-dependent insulinotropic polypeptide on whole-body glucose utilization in sheep 783

TEIN M. S. C., BREEN S. A., LOVEDAY B. E., DEVLIN H., BALMENT R. J., BOYD R. D. H., SIBLEY C. P. & GARLAND H. O. Bone mineral density and composition in rat pregnancy: effects of streptozotocin-induced diabetes mellitus and insulin replacement 165

THOMPSON R. T. *see* CHILIBECK P. D., PATERSON D. H., MCCREARY C. R., MARSH G. D., CUNNINGHAM D. A. & THOMPSON R. T. The effects of age on kinetics of oxygen uptake and phosphocreatine in humans during exercise 107

THORBØLL J. E. *see* MALTBÆK J. S., GRØNDAHL M. L., BERGGREEN P., NIELSEN C. G., THORBØLL J. E., SKADHAUGE E. & HANSEN M. B. Secretory response to cholera toxin in the porcine jejunum under different types of general anaesthesia 523

THULIN C. E. S. *see* WOOD L., NICOL D. J. & THULIN C. E. S. The effects of skin brushing on H reflex amplitude in normal human subjects 175

TREACHER D. F. *see* FORSLING M. L., MONTGOMERY H., HALPIN D., WINDLE R. J. & TREACHER D. F. Daily patterns of secretion of neurohypophysial hormones in man: effect of age 409

TSAO P. S. *see* MAXWELL A. J., TSAO P. S. & COOKE J. P. Modulation of the nitric oxide synthase pathway in atherosclerosis 573

VEES J. *see* MEYER R., LINZ K. W., SURGES R., MEINARDUS S., VEES J., HOFFMANN A., WINDHOLZ O. & GROHÉ C. Rapid modulation of L-type calcium current by acutely applied oestrogens in isolated cardiac myocytes from human, guinea-pig and rat 305

WAKUI M. *see* DOBASHI Y., KANNO T., SUGA S., SAITO Y. & WAKUI M. Regulation of spontaneous rhythmic contractions in rat pregnant myometrium by corticotrophin-releasing factor 639

WALLIS W. R. J. *see* COOKLIN M., WALLIS W. R. J., SHERIDAN D. J. & FRY C. H. Conduction velocity and gap junction resistance in hypertrophied, hypoxic guinea-pig left ventricular myocardium 763

WARD B. S., GLAZIER J. D., SIBLEY C. P. & BOYD R. D. H. Site of catecholamine modulation of feto-maternal electric potential difference in the pig 361

WARD C. W. *see* WILLIAMS J. H. & WARD C. W. Changes in skeletal muscle sarcoplasmic reticulum function and force production following myocardial infarction in rats 85

WARD C. W. *see* WILLIAMS J. H., WARD C. W., SPANGENBURG E. E., NELSON R., STAVRIANEAS S. & KLUG G. A. Glucose 6-phosphate alters rat skeletal muscle contractile apparatus and sarcoplasmic reticulum function 489

WARD S. A. *see* BOHNERT B., WARD S. A. & WHIPP B. J. Effects of prior arm exercise on pulmonary gas exchange kinetics during high-intensity leg exercise in humans 557

WELLER A. S., GREENHAFF P. L. & MACDONALD I. A. Physiological responses to moderate cold stress in man and the influence of prior prolonged exhaustive exercise 679

WESTERHOF N. *see* PAGLIARO P., GATTULLO D., LINDEN R. J., LOSANO G. & WESTERHOF N. Systolic coronary flow impediment in the dog: role of ventricular pressure and contractility 821

WHIPP B. J. *see* BOHNERT B., WARD S. A. & WHIPP B. J. Effects of prior arm exercise on pulmonary gas exchange kinetics during high-intensity leg exercise in humans 557

WIDDAS W. F. The glucose transporter of human erythrocytes – working hypothesis for its functional mechanism 187

WILLIAMS J. H. & WARD C. W. Changes in skeletal muscle sarcoplasmic reticulum function and force production following myocardial infarction in rats 85

WILLIAMS J. H., WARD C. W., SPANGENBURG E. E., NELSON R., STAVRIANEAS S. & KLUG G. A. Glucose 6-phosphate alters rat skeletal muscle contractile apparatus and sarcoplasmic reticulum function 489

WINDHOLZ O. *see* MEYER R., LINZ K. W., SURGES R., MEINARDUS S., VEES J., HOFFMANN A., WINDHOLZ O. & GROHÉ C. Rapid modulation of L-type calcium current by acutely applied oestrogens in isolated cardiac myocytes from human, guinea-pig and rat 305

WINDLE R. J. *see* FORSLING M. L., MONTGOMERY H., HALPIN D., WINDLE R. J. & TREACHER D. F. Daily patterns of secretion of neurohypophysial hormones in man: effect of age 409

WOOD L., NICOL D. J. & THULIN C. E. S. The effects of skin brushing on H reflex amplitude in normal human subjects 175

ZHONG H. *see* ROY R. R., PIEROTTI D. J., BALDWIN K. M., ZHONG H., HODGSON J. A. & EDGERTON V. R. Cyclical passive stretch influences the mechanical properties of the inactive cat soleus 377

ZIMAND S. *see* SCHEINOWITZ M., KOTLYAR A., ZIMAND S., OHAD D., LEIBOVITZ I., BLOOM N., GOLDBERG I., NASS D., ENGELBERG S., SAVION N. & ELDAR M. Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats 585

SUBJECT INDEX

Action potential
Electrocholecystogram: a study of the electro-mechanical activity of the gall bladder in a canine model **83**, 387, 1998
Regional differences in action potential characteristics and membrane currents of guinea-pig left ventricular myocytes **83**, 747, 1998

Adrenaline
Site of catecholamine modulation of feto-maternal electric potential difference in the pig **83**, 361, 1998

Ageing
The effects of age on kinetics of oxygen uptake and phosphocreatine in humans during exercise **83**, 107, 1998

Amino acid transport
System y$^+$L: the broad scope and cation modulated amino acid transporter **83**, 211, 1998

Anaesthesia
The relation between local cerebral blood flow and extracellular glucose concentration in rat striatum **83**, 233, 1998
Secretory response to cholera toxin in the porcine jejunum under different types of general anaesthesia **83**, 523, 1998

Antagonistic coactivation
Differences in human antagonistic ankle dorsiflexor coactivation between legs; can they explain the moment deficit in the weaker plantarflexor leg? **83**, 843, 1998

Artery
Vasorelaxant effect of thiopentone in isolated human epigastric arteries **83**, 461, 1998
Long-term administration of L-arginine did not influence blood pressure, heart rate, cardiac hypertrophy or arterial wall thickness of spontaneously hypertensive rats **83**, 595, 1998

Ascending pathway
Triple projections of neurones located in S1 and S2 segments of the cat spinal cord to the C6 segment, the cerebellum and the reticular formation **83**, 737, 1998

Aspartate/glutamate carrier
Mitochondrial carrier proteins can reversibly change their transport mode: the cases of the aspartate/glutamate and the phosphate carrier **83**, 259, 1998

Atherosclerosis
Modulation of the nitric oxide synthase pathway in atherosclerosis **83**, 573, 1998

ATPase
Glucose 6-phosphate alters rat skeletal muscle contractile apparatus and sarcoplasmic reticulum function **83**, 489, 1998

Atrial natriuretic peptide
Salt overload does not modify plasma atrial natriuretic peptide or vasopressin during pregnancy in rats **83**, 503, 1998

Blood flow
Influence of cerebral blood flow on the ventilatory response to hypoxia in humans **83**, 95, 1998

Blood pressure
Effects of arginine vasotocin, isotocin and melatonin on blood pressure in the conscious atlantic cod (*Gadus morhua*): hormonal interactions? **83**, 809, 1998

Bone
Effects of variations in dietary calcium and phosphorus supply on plasma and bone osteocalcin concentrations and bone mineralization in growing pigs **83**, 659, 1998
Effects of peptide fragments of protein kinase C on isolated rat osteoclasts **83**, 717, 1998

Book Reviews
Anaesthetic Physiology and Pharmacology, edited by W. McCaughey, R. S. J. Clarke, J. P. H. Fee and W. F. M. Wallace **83**, 119, 1998
Eckert Animal Physiology: Mechanisms and Adaptations, 4th edn, by D. Randall, W. Burggren and K. French **83**, 571, 1998
Fetus and Neonate, Physiology and Clinical Applications 4: Body Fluids and Kidney Function, edited by Robert A. Brace, Mark A. Hanson and Charles H. Rodeck **83**, 705, 1998
An Introduction to Molecular Biology, edited by Robert C. Tait **83**, 875, 1998
Comparative Vertebrate Endocrinology, 3rd edn, by Peter J. Bentley **83**, 875, 1998

Brown adipose tissue
Thermoregulation in newborn lambs: influence of feeding and ambient temperature on brown adipose tissue **83**, 651, 1998

Caecum
Gas handling in the caecum of the horse **83**, 397, 1998

Calcium
Changes in skeletal muscle sarcoplasmic reticulum function and force production following myocardial infarction in rats **83**, 85, 1998
Calcium-inhibitable current in cultured embryonic chick cardiac myocytes: possibly via a novel chloride channel **83**, 323, 1998
Differential effects of hypoxia on the intracellular Ca^{2+} concentration of myocytes isolated from different regions of the rat pulmonary arterial tree **83**, 337, 1998
Changes in contraction, cytosolic Ca^{2+} and pH during metabolic inhibition and upon restoration of mitochondrial respiration in rat ventricular myocytes **83**, 349, 1998
Vasorelaxant effect of thiopentone in isolated human epigastric arteries **83**, 461, 1998
Glucose 6-phosphate alters rat skeletal muscle contractile apparatus and sarcoplasmic reticulum function **83**, 489, 1998

Calcium current
The effect of temperature on the rate-dependent decrease of the rat ventricular calcium current **83**, 49, 1998

Calcium current (*cont.*)
Rapid modulation of L-type calcium current by acutely applied oestrogens in isolated cardiac myocytes from human, guinea-pig and rat **83**, 305, 1998

Cardiac muscle contraction
Changes in contraction, cytosolic Ca^{2+} and pH during metabolic inhibition and upon restoration of mitochondrial respiration in rat ventricular myocytes **83**, 349, 1998

Cardiac myocyte
The effect of temperature on the rate-dependent decrease of the rat ventricular calcium current **83**, 49, 1998
A method for reversible permeabilization of isolated rat ventricular myocytes **83**, 293, 1998
Rapid modulation of L-type calcium current by acutely applied oestrogens in isolated cardiac myocytes from human, guinea-pig and rat **83**, 305, 1998

Cat
Triple projections of neurones located in S1 and S2 segments of the cat spinal cord to the C6 segment, the cerebellum and the reticular formation **83**, 737, 1998

Cerebral blood flow
The relation between local cerebral blood flow and extracellular glucose concentration in rat striatum **83**, 233, 1998

Chloride current
Calcium-inhibitable current in cultured embryonic chick cardiac myocytes: possibly via a novel chloride channel **83**, 323, 1998

Circadian rhythm
Effects of arginine vasotocin, isotocin and melatonin on blood pressure in the conscious atlantic cod (*Gadus morhua*): hormonal interactions? **83**, 809, 1998

Circulatory limitation
Effects of prior arm exercise on pulmonary gas exchange kinetics during high-intensity leg exercise in humans **83**, 557, 1998

Cold stress
Bone mineral density and composition in rat pregnancy: effects of streptozotocin-induced diabetes mellitus and insulin replacement **83**, 165, 1998
The effects of substrate and fluid provision on thermoregulatory, cardiorespiratory and metabolic responses to prolonged exercise in a cold environment in man **83**, 419, 1998

Collagen
Effects of variations in dietary calcium and phosphorus supply on plasma and bone osteocalcin concentrations and bone mineralization in growing pigs **83**, 659, 1998

Contractility
Altered [^{3}H]ouabain binding to cardiac muscle in insulin-dependent and non-insulin-dependent diabetic rats **83**, 65, 1998
Systolic coronary flow impediment in the dog: role of ventricular pressure and contractility **83**, 821, 1998

Contraction
Vasorelaxant effect of thiopentone in isolated human epigastric arteries **83**, 461, 1998
The influence of streptozotocin-induced diabetes and the antihyperglycaemic agent metformin on the contractile characteristics and the membrane potential of the rat diaphragm **83**, 481, 1998
Differences in human antagonistic ankle dorsiflexor coactivation between legs; can they explain the moment deficit in the weaker plantarflexor leg? **83**, 843, 1998

Coronary blood flow
Systolic coronary flow impediment in the dog: role of ventricular pressure and contractility **83**, 821, 1998

Cyclic AMP
Calcium-inhibitable current in cultured embryonic chick cardiac myocytes: possibly via a novel chloride channel **83**, 323, 1998

Diabetes
Altered [^{3}H]ouabain binding to cardiac muscle in insulin-dependent and non-insulin-dependent diabetic rats **83**, 65, 1998
The influence of streptozotocin-induced diabetes and the antihyperglycaemic agent metformin on the contractile characteristics and the membrane potential of the rat diaphragm **83**, 481, 1998

Diurnal rhythm
Daily patterns of secretion of neurohypophysial hormones in man: effect of age **83**, 409, 1998

Electrogenesis
Site of catecholamine modulation of feto-maternal electric potential difference in the pig **83**, 361, 1998

Electromyogram
The control of timing and amplitude of EMG activity in landing movements in humans **83**, 857, 1998

Endocardium
Regional differences in action potential characteristics and membrane currents of guinea-pig left ventricular myocytes **83**, 747, 1998

Energy
Channelling free energy into work in biological processes **83**, 243, 1998

Energy metabolism
Thermoregulatory responses of the newborn pig during experimentally induced hypothermia and rewarming **83**, 667, 1998

Epithelium
K^+ transport in colonocytes isolated from the chick: effect of anisosmotic buffers **83**, 629, 1998

Erythrocyte
The glucose transporter of human erythrocytes – working hypothesis for its functional mechanism **83**, 187, 1998
Membrane-bound glyceraldehyde-3-phosphate dehydrogenase and multiphasic erythrocyte sugar transport **83**, 195, 1998
Adenosine and hypoxanthine transport in horse erythrocytes: evidence for a polymorphism in the transport of hypoxanthine via a sodium-dependent cotransporter **83**, 203, 1998
System y^+L: the broad scope and cation modulated amino acid transporter **83**, 211, 1998

Erythrocyte (*cont.*)
Glucose transport inhibitors protect against 1,2-cyclohexanedione-produced potassium loss from human red blood cells **83**, 239, 1998
Evidence from temperature studies that the human erythrocyte hexose transporter has a transient memory of its dissociated ligands **83**, 253, 1998
Exercise
Physiological responses to moderate cold stress in man and the influence of prior prolonged exhaustive exercise **83**, 679, 1998
Fermentation
Gas handling in the caecum of the horse **83**, 397, 1998
Fish
Effects of arginine vasotocin, isotocin and melatonin on blood pressure in the conscious atlantic cod (*Gadus morhua*): hormonal interactions? **83**, 809, 1998
Fluorescent indicator
Intracellular Mg^{2+} regulation in voltage-clamped *Helix aspersa* neurones measured with mag-fura-2 and Mg^{2+}-sensitive microelectrodes **83**, 449, 1998
Force
The influence of stimuation frequency on force–velocity characteristics of *in situ* rat medial gastrocnemius muscle **83**, 77, 1998
Channelling free energy into work in biological processes **83**, 243, 1998
Temperature dependence of mechanical power output in mammalian (rat) skeletal muscle **83**, 371, 1998
Gall bladder
Electrocholecystogram: a study of the electro-mechanical activity of the gall bladder in a canine model **83**, 387, 1998
Gastric inhibitory polypeptide
Effect of glucose-dependent insulinotropic polypeptide on whole-body glucose utilization in sheep **83**, 783, 1998
Gastrointestinal peptide
Basolateral D-glucose transport activity along the crypt–villus axis in rat jejunum and upregulation induced by gastric inhibitory peptide and glucagon-like peptide-2 **83**, 605, 1998
Glomerular filtration rate
Proximal reabsorption with changing tubular fluid inflow in rat nephrons **83**, 35, 1998
Glomerulo-tubular balance
Proximal reabsorption with changing tubular fluid inflow in rat nephrons **83**, 35, 1998
Glucose
Plasma prolactin and glucose alterations induced by surgical stress: a single or dual response? **83**, 1, 1998
The relation between local cerebral blood flow and extracellular glucose concentration in rat striatum **83**, 233, 1998
Glucose transport
The glucose transporter of human erythrocytes – working hypothesis for its functional mechanism **83**, 187, 1998
Glucose transport (*cont.*)
Membrane-bound glyceraldehyde-3-phosphate dehydrogenase and multiphasic erythrocyte sugar transport **83**, 195, 1998
Glucose transport inhibitors protect against 1,2-cyclohexanedione-produced potassium loss from human red blood cells **83**, 239, 1998
Evidence from temperature studies that the human erythrocyte hexose transporter has a transient memory of its dissociated ligands **83**, 253, 1998
Proteins that interact with facilitative glucose transporters: implication for function **83**, 267, 1998
Basolateral D-glucose transport activity along the crypt–villus axis in rat jejunum and upregulation induced by gastric inhibitory peptide and glucagon-like peptide-2 **83**, 605, 1998
Glucose uptake
Effect of glucose-dependent insulinotropic polypeptide on whole-body glucose utilization in sheep **83**, 783, 1998
Guinea-pig
Regional differences in action potential characteristics and membrane currents of guinea-pig left ventricular myocytes **83**, 747, 1998
Gut
Novel form of L-aromatic amino acid decarboxylase mRNA in rat antral mucosa **83**, 617, 1998
H reflex
The effects of skin brushing on H reflex amplitude in normal human subjects **83**, 175, 1998
Heart
Changes in skeletal muscle sarcoplasmic reticulum function and force production following myocardial infarction in rats **83**, 85, 1998
Calcium-activated transient membrane currents are carried mainly by chloride ions in isolated atrial, ventricular and Purkinje cells of rabbit heart **83**, 137, 1998
The role of nitric oxide in the control by the vagal nerves of the heart of the ferret **83**, 469, 1998
Horse
Gas handling in the caecum of the horse **83**, 397, 1998
Hydraulic conductivity
Fluid uptake by the renal medullary vasa recta: an estimate based on a quantitative analysis of the distribution of fenestrae in the vasa recta of young Sprague–Dawley rats **83**, 23, 1998
Hypertension
Long-term administration of L-arginine did not influence blood pressure, heart rate, cardiac hypertrophy or arterial wall thickness of spontaneously hypertensive rats **83**, 595, 1998
Hypertrophy
Conduction velocity and gap junction resistance in hypertrophied, hypoxic guinea-pig left ventricular myocardium **83**, 763, 1998
Hypothermia
Thermoregulatory responses of the newborn pig during experimentally induced hypothermia and rewarming **83**, 667, 1998

Hypoxia
Influence of cerebral blood flow on the ventilatory response to hypoxia in humans **83**, 95, 1998
Differential effects of hypoxia on the intracellular Ca^{2+} concentration of myocytes isolated from different regions of the rat pulmonary arterial tree **83**, 337, 1998
Effects of intracellular Na^+, Mg^{2+} and metabolites on Ca^{2+}-activated K^+ channels in pulmonary and ear arterial smooth muscle cells of the rabbit **83**, 707, 1998
Conduction velocity and gap junction resistance in hypertrophied, hypoxic guinea-pig left ventricular myocardium **83**, 763, 1998
Infarction
Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats **83**, 585, 1998
Insulin
Effect of glucose-dependent insulinotropic polypeptide on whole-body glucose utilization in sheep **83**, 783, 1998
Intrapleural flow
An improved technique for studying pleural fluid pressure and composition in rabbits **83**, 435, 1998
Invertebrate
Comparison of extrinsic and intrinsic neuromodulation in two central pattern generator circuits in invertebrates **83**, 281, 1998
Inward rectifier potassium current
The effects of sodium substitution on currents determining the resting potential in guinea-pig ventricular cells **83**, 121, 1998
Ion transport
A new protocol for the measurement of picomole quantities of magnesium in rat renal tubular fluid **83**, 11, 1998
Iron deficiency
Interactions among iron, calcium, phosphorus and magnesium in the nutritionally iron-deficient rat **83**, 771, 1998
Jejunum
Secretory response to cholera toxin in the porcine jejunum under different types of general anaesthesia **83**, 523, 1998
Basolateral D-glucose transport activity along the crypt–villus axis in rat jejunum and upregulation induced by gastric inhibitory peptide and glucagon-like peptide-2 **83**, 605, 1998
Kidney
A new protocol for the measurement of picomole quantities of magnesium in rat renal tubular fluid **83**, 11, 1998
Fluid uptake by the renal medullary vasa recta: an estimate based on a quantitative analysis of the distribution of fenestrae in the vasa recta of young Sprague–Dawley rats **83**, 23, 1998
Lactic acidaemia
Effects of prior arm exercise on pulmonary gas exchange kinetics during high-intensity leg exercise in humans **83**, 557, 1998
Landing movement
The control of timing and amplitude of EMG activity in landing movements in humans **83**, 857, 1998
Left ventricular remodelling
Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats **83**, 585, 1998
Liver
Blood mobilization from the liver of the anaesthetized dog **83**, 513, 1998
Lung liquid volume
Role of luminal volume changes in the increase in pulmonary blood flow at birth in sheep **83**, 833, 1998
Luteinizing hormone
Chronic intermittent immobilization of male rats throughout sexual development: a stress protocol **83**, 701, 1998
Magnesium
A new protocol for the measurement of picomole quantities of magnesium in rat renal tubular fluid **83**, 11, 1998
Effects of short chain fatty acids and carbon dioxide on magnesium transport across sheep rumen epithelium **83**, 155, 1998
Intracellular Mg^{2+} regulation in voltage-clamped *Helix aspersa* neurones measured with mag-fura-2 and Mg^{2+}-sensitive microelectrodes **83**, 449, 1998
Microdialysis
Measurement of nitric oxide concentration in human skin *in vivo* using dermal microdialysis **83**, 431, 1998
Mineral absorption
Interactions among iron, calcium, phosphorus and magnesium in the nutritionally iron-deficient rat **83**, 771, 1998
Mineral requirement
Effects of variations in dietary calcium and phosphorus supply on plasma and bone osteocalcin concentrations and bone mineralization in growing pigs **83**, 659, 1998
Mitochondrion
Mitochondrial carrier proteins can reversibly change their transport mode: the cases of the aspartate/glutamate and the phosphate carrier **83**, 259, 1998
Motor control
The control of timing and amplitude of EMG activity in landing movements in humans **83**, 857, 1998
Motor system
Comparison of extrinsic and intrinsic neuromodulation in two central pattern generator circuits in invertebrates **83**, 281, 1998
mRNA
Novel form of L-aromatic amino acid decarboxylase mRNA in rat antral mucosa **83**, 617, 1998
Mucosa
Novel form of L-aromatic amino acid decarboxylase mRNA in rat antral mucosa **83**, 617, 1998
Muscle
Changes in skeletal muscle sarcoplasmic reticulum function and force production following myocardial infarction in rats **83**, 85, 1998

Muscle (*cont.*)
Temperature dependence of mechanical power output in mammalian (rat) skeletal muscle **83**, 371, 1998
The influence of streptozotocin-induced diabetes and the antihyperglycaemic agent metformin on the contractile characteristics and the membrane potential of the rat diaphragm **83**, 481, 1998
Muscle contraction
Regulation of spontaneous rhythmic contractions in rat pregnant myometrium by corticotrophin-releasing factor **83**, 639, 1998
Myocardium
Basic fibroblast growth factor induces myocardial hypertrophy following acute infarction in rats **83**, 585, 1998
Conduction velocity and gap junction resistance in hypertrophied, hypoxic guinea-pig left ventricular myocardium **83**, 763, 1998
Myometrium
Regulation of spontaneous rhythmic contractions in rat pregnant myometrium by corticotrophin-releasing factor **83**, 639, 1998
Neurone
Intracellular Mg^{2+} regulation in voltage-clamped *Helix aspersa* neurones measured with mag-fura-2 and Mg^{2+}-sensitive microelectrodes **83**, 449, 1998
Neurotransmitter
Comparison of extrinsic and intrinsic neuromodulation in two central pattern generator circuits in invertebrates **83**, 281, 1998
Nitric oxide
Measurement of nitric oxide concentration in human skin *in vivo* using dermal microdialysis **83**, 431, 1998
The role of nitric oxide in the control by the vagal nerves of the heart of the ferret **83**, 469, 1998
The role of nitric oxide in the control of protein secretion in the parotid gland of anaesthetized sheep **83**, 533, 1998
Modulation of the nitric oxide synthase pathway in atherosclerosis **83**, 573, 1998
Long-term administration of L-arginine did not influence blood pressure, heart rate, cardiac hypertrophy or arterial wall thickness of spontaneously hypertensive rats **83**, 595, 1998
Non-adrenergic non-cholinergic response
Non-adrenergic, non-cholinergic reflex secretion of parotid saliva in rats elicited by mastication and acid applied on the tongue **83**, 697, 1998
Oestrogen
Rapid modulation of L-type calcium current by acutely applied oestrogens in isolated cardiac myocytes from human, guinea-pig and rat **83**, 305, 1998
Osmolarity
K^+ transport in colonocytes isolated from the chick: effect of anisosmotic buffers **83**, 629, 1998
Osteoclast
Effects of peptide fragments of protein kinase C on isolated rat osteoclasts **83**, 717, 1998
Oxidation
Bone mineral density and composition in rat pregnancy: effects of streptozotocin-induced diabetes mellitus and insulin replacement **83**, 165, 1998
The effects of substrate and fluid provision on thermoregulatory, cardiorespiratory and metabolic responses to prolonged exercise in a cold environment in man **83**, 419, 1998
Oxygen uptake
The effects of age on kinetics of oxygen uptake and phosphocreatine in humans during exercise **83**, 107, 1998
Effects of prior arm exercise on pulmonary gas exchange kinetics during high-intensity leg exercise in humans **83**, 557, 1998
Age-related changes in oxygen and nutrient uptake by hindquarters in newborn pigs during cold-induced shivering **83**, 793, 1998
Oxytocin
Daily patterns of secretion of neurohypophysial hormones in man: effect of age **83**, 409, 1998
P-glycoprotein
Kinetics of the P-glycoprotein, the multidrug transporter **83**, 221, 1998
Parotid gland
The role of nitric oxide in the control of protein secretion in the parotid gland of anaesthetized sheep **83**, 533, 1998
Depletion of acinar secretory granules in the ferret parotid gland: effects of substance P and vasoactive intestinal peptide **83**, 727, 1998
Permeabilization
A method for reversible permeabilization of isolated rat ventricular myocytes **83**, 293, 1998
pH
Changes in contraction, cytosolic Ca^{2+} and pH during metabolic inhibition and upon restoration of mitochondrial respiration in rat ventricular myocytes **83**, 349, 1998
Phosphocreatine
The effects of age on kinetics of oxygen uptake and phosphocreatine in humans during exercise **83**, 107, 1998
Placenta
Site of catecholamine modulation of feto-maternal electric potential difference in the pig **83**, 361, 1998
Pleural space
An improved technique for studying pleural fluid pressure and composition in rabbits **83**, 435, 1998
Potassium
Glucose transport inhibitors protect against 1,2-cyclohexanedione-produced potassium loss from human red blood cells **83**, 239, 1998
Potassium channel
K^+ transport in colonocytes isolated from the chick: effect of anisosmotic buffers **83**, 629, 1998
Effects of intracellular Na^+, Mg^{2+} and metabolites on Ca^{2+}-activated K^+ channels in pulmonary and ear arterial smooth muscle cells of the rabbit **83**, 707, 1998

Pregnancy
Salt overload does not modify plasma atrial natriuretic peptide or vasopressin during pregnancy in rats **83**, 503, 1998
Regulation of spontaneous rhythmic contractions in rat pregnant myometrium by corticotrophin-releasing factor **83**, 639, 1998
Prolactin
Plasma prolactin and glucose alterations induced by surgical stress: a single or dual response? **83**, 1, 1998
Protein kinase C
Effects of peptide fragments of protein kinase C on isolated rat osteoclasts **83**, 717, 1998
Protein secretion
The role of nitric oxide in the control of protein secretion in the parotid gland of anaesthetized sheep **83**, 533, 1998
Proximal tubule
Proximal reabsorption with changing tubular fluid inflow in rat nephrons **83**, 35, 1998
Pulmonary artery
Differential effects of hypoxia on the intracellular Ca^{2+} concentration of myocytes isolated from different regions of the rat pulmonary arterial tree **83**, 337, 1998
Pulmonary vascular resistance
Role of luminal volume changes in the increase in pulmonary blood flow at birth in sheep **83**, 833, 1998
Purine transport
Adenosine and hypoxanthine transport in horse erythrocytes: evidence for a polymorphism in the transport of hypoxanthine via a sodium-dependent cotransporter **83**, 203, 1998
Purkinje cell
Calcium-activated transient membrane currents are carried mainly by chloride ions in isolated atrial, ventricular and Purkinje cells of rabbit heart **83**, 137, 1998
Resting potential
The effects of sodium substitution on currents determining the resting potential in guinea-pig ventricular cells **83**, 121, 1998
Review Articles
Plasma prolactin and glucose alterations induced by surgical stress: a single or dual response? **83**, 1, 1998
Modulation of the nitric oxide synthase pathway in atherosclerosis **83**, 573, 1998
Ruminant
Effects of short chain fatty acids and carbon dioxide on magnesium transport across sheep rumen epithelium **83**, 155, 1998
Saliva
Autonomic control of submandibular protein secretion in the anaesthetized calf **83**, 545, 1998
Non-adrenergic, non-cholinergic reflex secretion of parotid saliva in rats elicited by mastication and acid applied on the tongue **83**, 697, 1998
Secretion
Secretory response to cholera toxin in the porcine jejunum under different types of general anaesthesia **83**, 523, 1998
Non-adrenergic, non-cholinergic reflex secretion of parotid saliva in rats elicited by mastication and acid applied on the tongue **83**, 697, 1998
Shivering thermogenesis
Physiological responses to moderate cold stress in man and the influence of prior prolonged exhaustive exercise **83**, 679, 1998
Short chain fatty acid
Effects of short chain fatty acids and carbon dioxide on magnesium transport across sheep rumen epithelium **83**, 155, 1998
Skeletal muscle
The influence of stimuation frequency on force–velocity characteristics of *in situ* rat medial gastrocnemius muscle **83**, 77, 1998
Cyclical passive stretch influences the mechanical properties of the inactive cat soleus **83**, 377, 1998
Glucose 6-phosphate alters rat skeletal muscle contractile apparatus and sarcoplasmic reticulum function **83**, 489, 1998
Age-related changes in oxygen and nutrient uptake by hindquarters in newborn pigs during cold-induced shivering **83**, 793, 1998
Skin
The effects of skin brushing on H reflex amplitude in normal human subjects **83**, 175, 1998
Measurement of nitric oxide concentration in human skin *in vivo* using dermal microdialysis **83**, 431, 1998
Sodium
The effects of sodium substitution on currents determining the resting potential in guinea-pig ventricular cells **83**, 121, 1998
Spinal cord
Cyclical passive stretch influences the mechanical properties of the inactive cat soleus **83**, 377, 1998
Triple projections of neurones located in S1 and S2 segments of the cat spinal cord to the C6 segment, the cerebellum and the reticular formation **83**, 737, 1998
Stimulation
The influence of stimuation frequency on force–velocity characteristics of *in situ* rat medial gastrocnemius muscle **83**, 77, 1998
The effects of skin brushing on H reflex amplitude in normal human subjects **83**, 175, 1998
Streptolysin O
A method for reversible permeabilization of isolated rat ventricular myocytes **83**, 293, 1998
Stress
Plasma prolactin and glucose alterations induced by surgical stress: a single or dual response? **83**, 1, 1998
Chronic intermittent immobilization of male rats throughout sexual development: a stress protocol **83**, 701, 1998

Stretch
Cyclical passive stretch influences the mechanical properties of the inactive cat soleus **83**, 377, 1998
Submandibular gland
Autonomic control of submandibular protein secretion in the anaesthetized calf **83**, 545, 1998
Substance P
Depletion of acinar secretory granules in the ferret parotid gland: effects of substance P and vasoactive intestinal peptide **83**, 727, 1998
Sympathetic nervous system
Blood mobilization from the liver of the anaesthetized dog **83**, 513, 1998
Autonomic control of submandibular protein secretion in the anaesthetized calf **83**, 545, 1998
Symposium Papers
The glucose transporter of human erythrocytes – working hypothesis for its functional mechanism **83**, 187, 1998
Membrane-bound glyceraldehyde-3-phosphate dehydrogenase and multiphasic erythrocyte sugar transport **83**, 195, 1998
Adenosine and hypoxanthine transport in horse erythrocytes: evidence for a polymorphism in the transport of hypoxanthine via a sodium-dependent cotransporter **83**, 203, 1998
System y^+L: the broad scope and cation modulated amino acid transporter **83**, 211, 1998
Kinetics of the P-glycoprotein, the multidrug transporter **83**, 221, 1998
The relation between local cerebral blood flow and extracellular glucose concentration in rat striatum **83**, 233, 1998
Glucose transport inhibitors protect against 1,2-cyclohexanedione-produced potassium loss from human red blood cells **83**, 239, 1998
Channelling free energy into work in biological processes **83**, 243, 1998
Evidence from temperature studies that the human erythrocyte hexose transporter has a transient memory of its dissociated ligands **83**, 253, 1998
Proteins that interact with facilitative glucose transporters: implication for function **83**, 267, 1998
Temperature
The effect of temperature on the rate-dependent decrease of the rat ventricular calcium current **83**, 49, 1998
Temperature dependence of mechanical power output in mammalian (rat) skeletal muscle **83**, 371, 1998
Thermoregulation in newborn lambs: influence of feeding and ambient temperature on brown adipose tissue **83**, 651, 1998
Testosterone
Chronic intermittent immobilization of male rats throughout sexual development: a stress protocol **83**, 701, 1998
Thermogenesis
Age-related changes in oxygen and nutrient uptake by hindquarters in newborn pigs during cold-induced shivering **83**, 793, 1998
Thermoregulation
Bone mineral density and composition in rat pregnancy: effects of streptozotocin-induced diabetes mellitus and insulin replacement **83**, 165, 1998
The effects of substrate and fluid provision on thermoregulatory, cardiorespiratory and metabolic responses to prolonged exercise in a cold environment in man **83**, 419, 1998
Thermoregulation in newborn lambs: influence of feeding and ambient temperature on brown adipose tissue **83**, 651, 1998
Thermoregulatory responses of the newborn pig during experimentally induced hypothermia and rewarming **83**, 667, 1998
Physiological responses to moderate cold stress in man and the influence of prior prolonged exhaustive exercise **83**, 679, 1998
Transport
Kinetics of the P-glycoprotein, the multidrug transporter **83**, 221, 1998
Mitochondrial carrier proteins can reversibly change their transport mode: the cases of the aspartate/glutamate and the phosphate carrier **83**, 259, 1998
Vagus
The role of nitric oxide in the control by the vagal nerves of the heart of the ferret **83**, 469, 1998
Vasa recta
Fluid uptake by the renal medullary vasa recta: an estimate based on a quantitative analysis of the distribution of fenestrae in the vasa recta of young Sprague–Dawley rats **83**, 23, 1998
Vascular resistance
Blood mobilization from the liver of the anaesthetized dog **83**, 513, 1998
Vascular smooth muscle
Effects of intracellular Na^+, Mg^{2+} and metabolites on Ca^{2+}-activated K^+ channels in pulmonary and ear arterial smooth muscle cells of the rabbit **83**, 707, 1998
Vasoactive intestinal peptide
Depletion of acinar secretory granules in the ferret parotid gland: effects of substance P and vasoactive intestinal peptide **83**, 727, 1998
Vasopressin
Daily patterns of secretion of neurohypophysial hormones in man: effect of age **83**, 409, 1998
Salt overload does not modify plasma atrial natriuretic peptide or vasopressin during pregnancy in rats **83**, 503, 1998
Ventilation
Influence of cerebral blood flow on the ventilatory response to hypoxia in humans **83**, 95, 1998
Ventricular pressure
Systolic coronary flow impediment in the dog: role of ventricular pressure and contractility **83**, 821, 1998
Work
Channelling free energy into work in biological processes **83**, 243, 1998